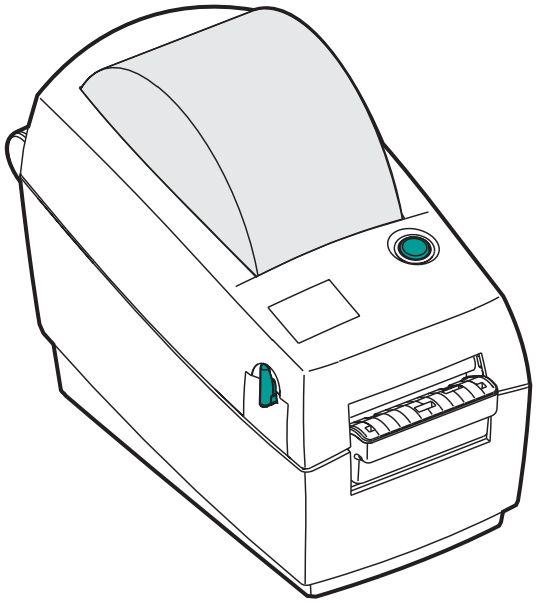
LP2824
Thermal Printer
User's Manual



Eltron®

User's Manual No. 980293-001 Rev. A

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FOREWORD

This manual provides installation and operation information for the LP2824 series printers, manufactured by Zebra Technologies Corporation, Camarillo, California.

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TRADEMARKS

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LP2824 Thermal Printers

CE

European Council Directive		Compliance to Standards	
89/336/EEC	EMC Directive	EN 55022-A, CISPR 22	RF Emissions control
92/31/EE	EMC Directive	EN 50082-1 IEC 801	Immunity to Electro-magnetic Disturbances

FCC - DECLARATION OF CONFORMITY:

FC

Model: LP2824 conforms to the following specification:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109(a) Class B digital device

Supplemental Information:
This device complies with Part 15 of the FCC Rules. Operation is subject to the following Two Conditions: (1) This device may not cause harmful interference , and (2) this device must accept any interference received, including interference that may cause undesired operation.

INDUSTRY CANADA NOTICE:

This device complies with Industry Canada ICS-003 class B requirements.

Cet equipement est conforme a l'ICS-003 classe B de la norm Industrielle Canadian

WARRANTY INFORMATION

We Need To Hear From You!

To Establish Your Warranty Period And Provide Access To Technical Support, Send Us Your Product Registration Card Today!

Zebra Technologies Corporation warrants the mechanism, control electronics and power supply, under normal use and service, to be free from defects in material and workmanship for a period of twelve (12) months from the date of purchase by the end user. Zebra Technologies Corporation warrants the print head, under normal use and service, to be free from defects in material and workmanship for a period of ninety (90) days or 30KM of printing (whichever occurs first) from the date of purchase by the end user. Proof of purchase or product registration is required. If proof of purchase or product registration cannot be established, shipment date to the original buyer (dealer or distributor) will be used to establish the warranty period.

Failure to exercise caution to protect the equipment from electrostatic discharge damage, adverse temperature and humidity conditions or physical abuse may void the warranty. Failure to use only Eltron brand approved media may void the warranty. Zebra Technologies Corporation will, at its option, repair or replace the equipment or any parts which are determined to be defective within this warranty period, and which are returned to Zebra Technologies Corporation F.O.B. factory of origin.

The warranty set forth above is exclusive and no other warranty, whether written or oral, is expressed or implied. Zebra Technologies Corporation specifically disclaims the implied warranties of merchantability and fitness for a particular purpose.

RETURN MATERIALS AUTHORIZATION

Before returning any equipment to Zebra for in warranty or out of warranty repair, contact Repair Administration for a Return Materials Authorization (RMA) number. Repack the equipment in the original packing material and mark the RMA number clearly on the outside. Ship the equipment, freight prepaid, to the address listed below:

Zebra Eltron Repair Administration, USA
1001 Flynn Road
Camarillo, CA. 93012
Phone: +1 (805) 579-1800
FAX: +1 (805) 579-1808

Label Printers:
Zebra Technologies, Europe
Zebra House
The Valley Centre, Gordon Road
High Wycombe
Buckinghamshire HP13 6EQ, UK
Phone: +44 (0) 1494 472872
FAX: +44 (0) 1494 450103

Card Printers:
Zebra Technologies, Europe
Zone Indutrielle, Rue d'Amsterdam
44370 Varades, France
Phone: +33 (0) 240 097 070
FAX: +33 (0) 240 834 745

SHOCK HAZARD WARNING:

The printer and power supply should never be operated in a location where either one can get wet. Personal injury could result.

MEDIA WARNING:

Always use high quality Eltron approved labels, tags and transfer ribbons. If adhesive backed labels are used that DO NOT lay flat on the backing liner, the exposed edges may stick to the label guides and rollers inside the printer, causing the label to peel off from the liner and jam the printer. Eltron approved supplies can be ordered from your ELTRON dealer. For the name of a dealer in your area, call the nearest Eltron office (located on the back of this manual).

RELOADING HINT:

If you should run out of labels while printing, DO NOT turn the power switch OFF (0) while reloading or data loss may result. The printer will automatically a new label roll is loaded.

STATIC DISCHARGE:

The discharge of electrostatic energy that accumulates on the surface of the human body or other surfaces can damage or destroy the print head or electronic components used in this device.

DO NOT TOUCH the print head or the electronic components under the top cover.

THERMAL PRINTING:

The print head becomes hot while printing. To protect from damaging the print head and risk of personal injury, avoid touching the print head. Use only the cleaning pen to perform maintenance.

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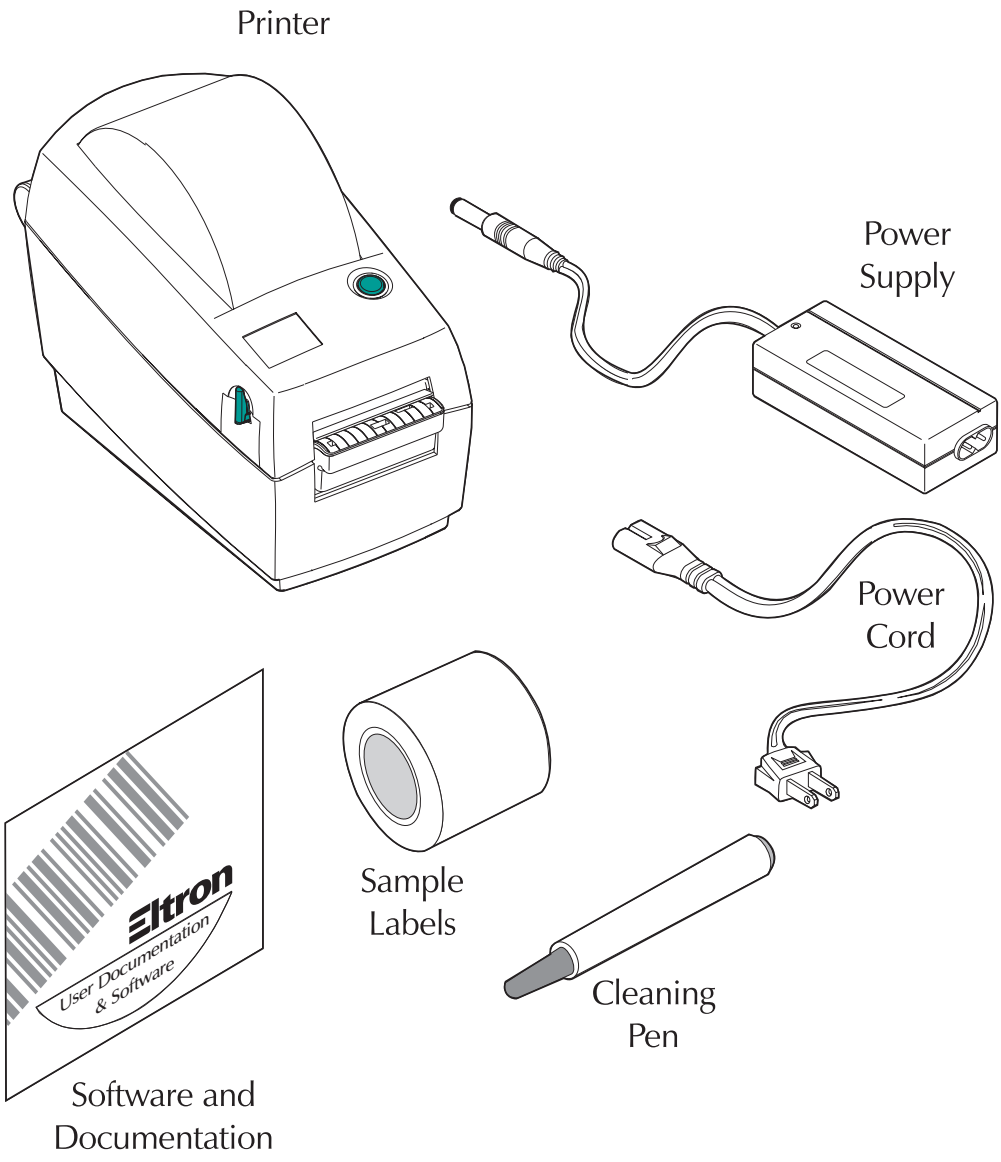
1
Installation and Operation

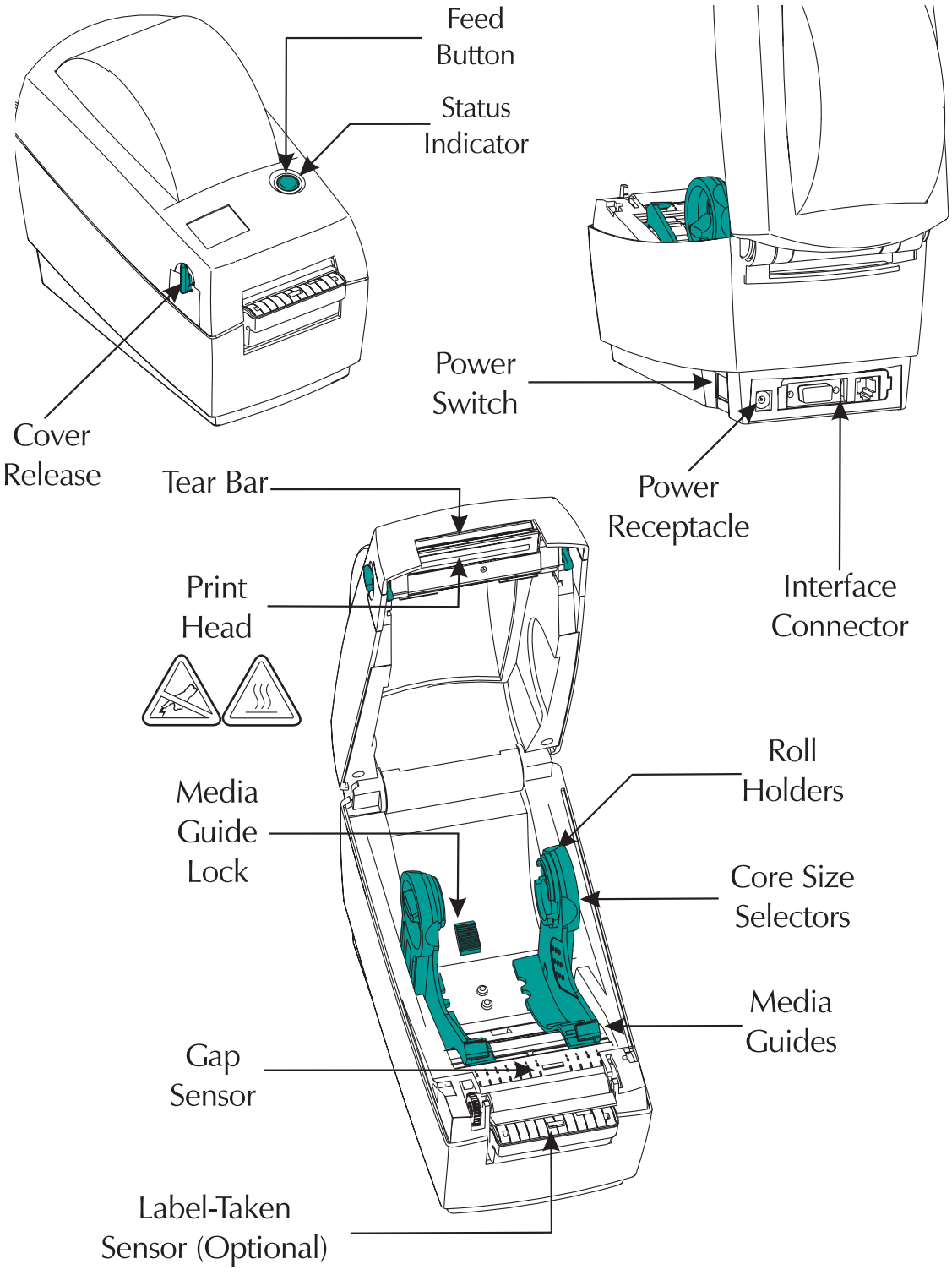
This section provides information on the installation and operation of the printer.

The printer is a low cost, desktop direct thermal printer. The printer is specifically designed for printing labels, tags or continuous receipts (with or without bar codes) from any DOS™, Windows™ or ASCII-based compatible host.

Unpacking Your Printer



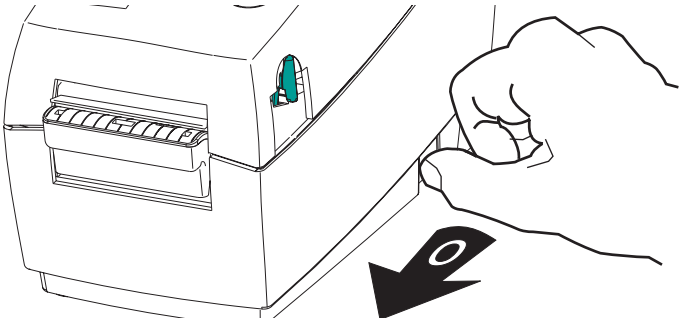
Getting To Know Your Printer



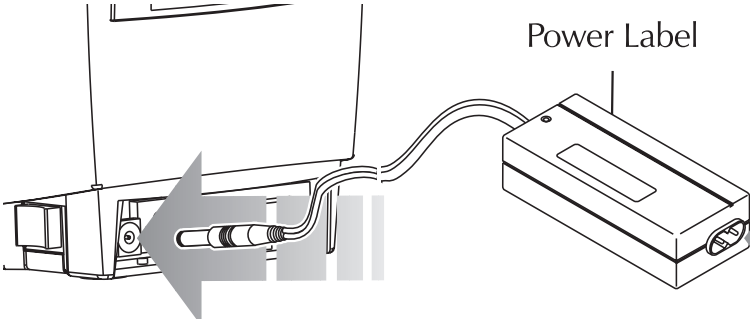
Installation The following steps will guide you through the installation of the printer and software.

Step ❶ Attach Power Supply To The Printer

Power OFF

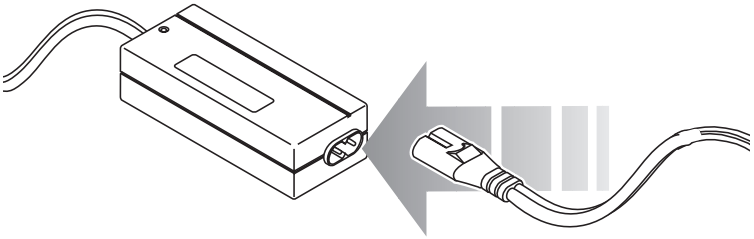


Check Voltage

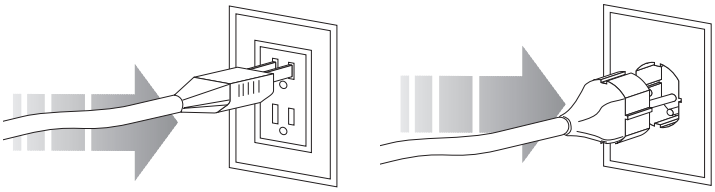


Plug in Power Module

Plug in Power Cord



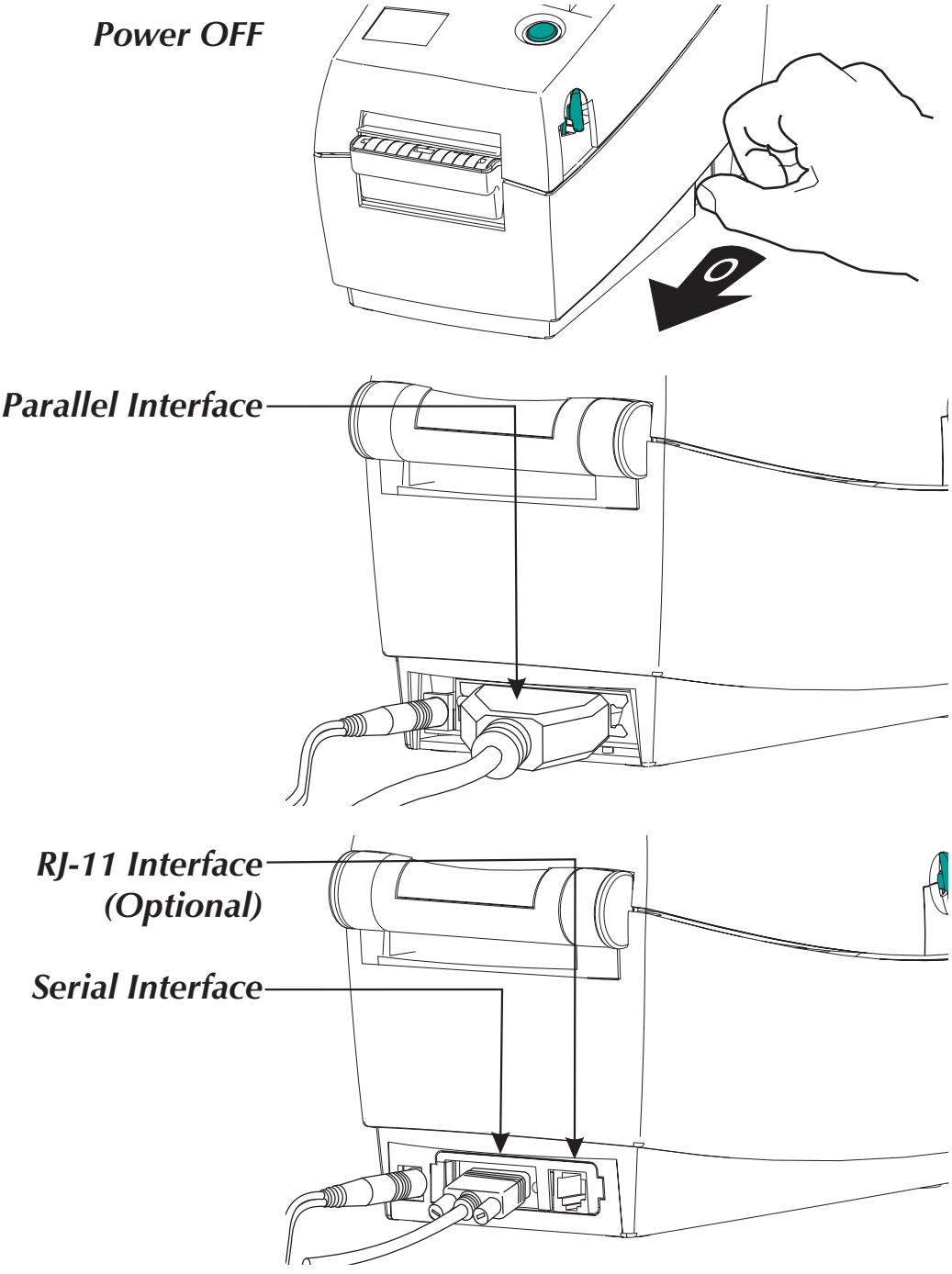
Plug Power Cord into a Suitable AC Outlet



See the SHOCK HAZARD WARNING on page iv.

Step ❷ Attach Interface Cable

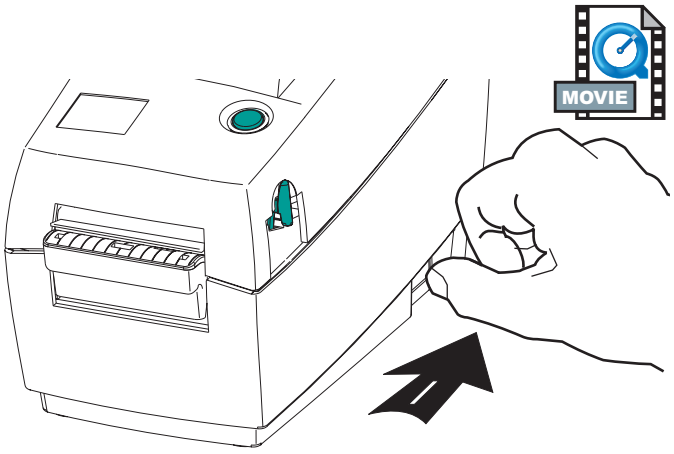
The printer has either a parallel interface or a serial interface (with optional RJ-11 connector).



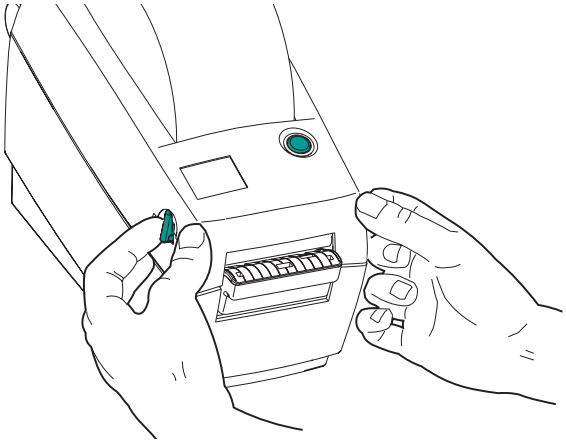
For additional information on serial cable wiring, refer to Appendix A.

Step ❸ Load Labels

Power ON

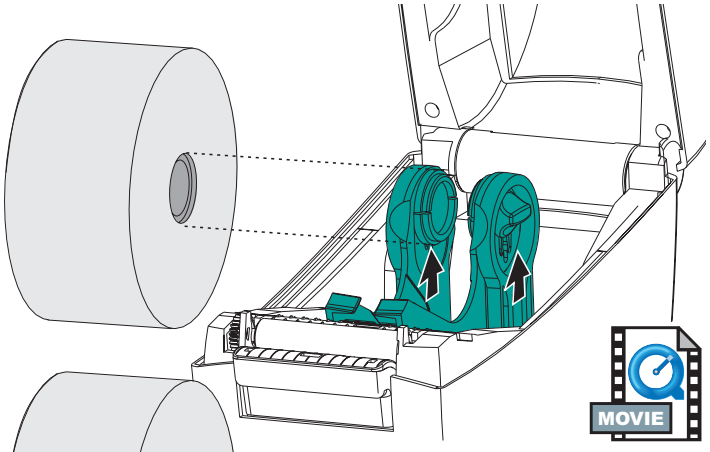


Open Cover

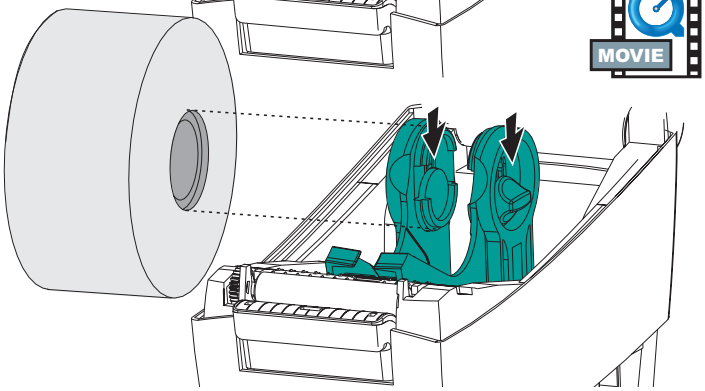


Adjust Holders

1.0 inch
2.5 cm

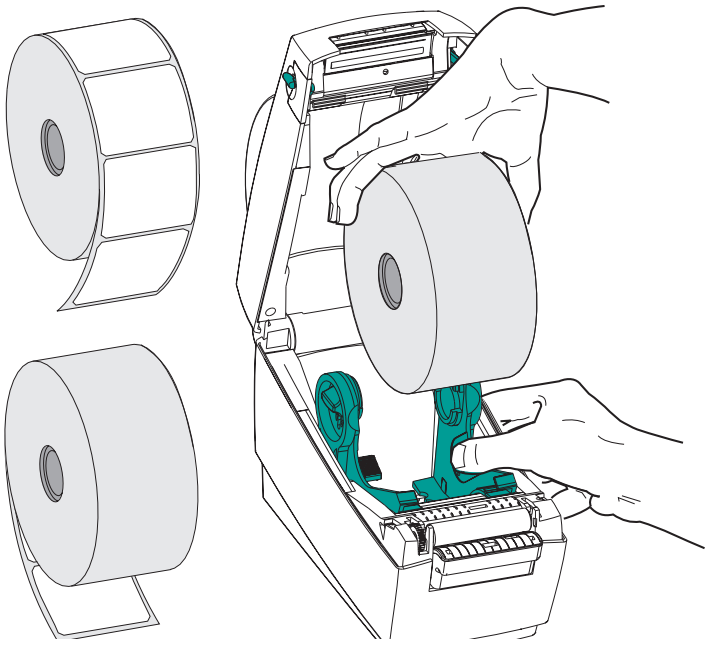


1.5 inch
3.8 cm

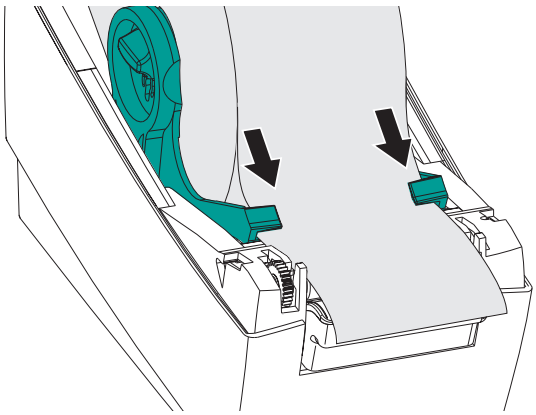


Load Labels - continued

Install Roll

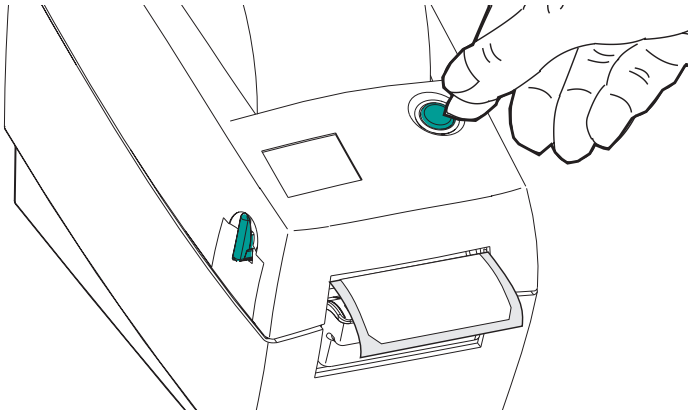


Thread Through Guides



Close Cover

Tap Feed Button

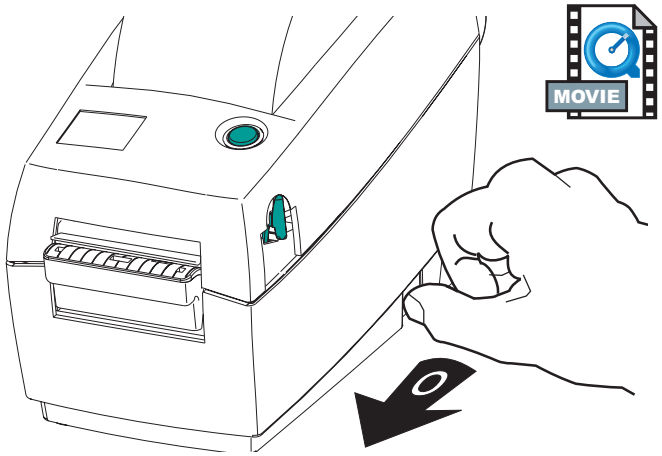


If the indicator remains dark, see Appendix A - Troubleshooting.

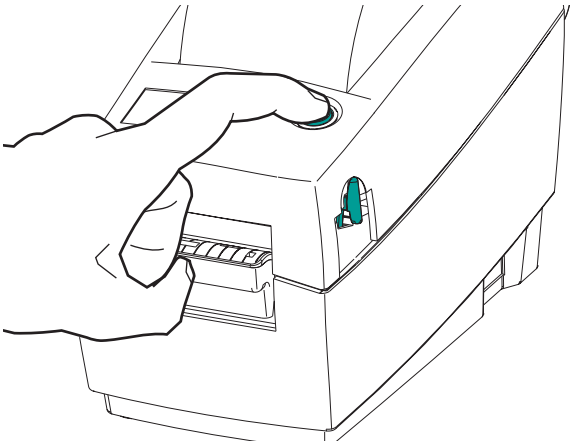
Step ❹ AutoSense Gap Sensor Adjustment

Perform this procedure when loading a new roll. If your printer has the label dispenser option, turn OFF the label taken sensor.

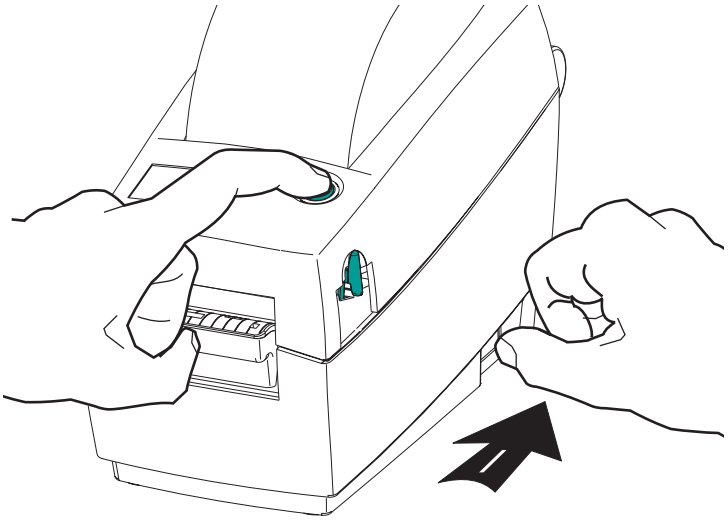
Power OFF



Hold Feed Button

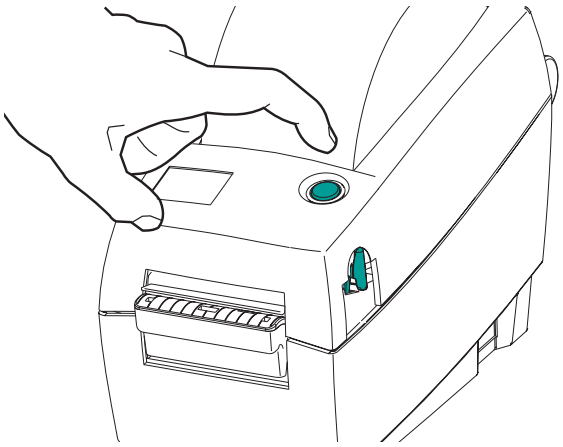


Power ON



AutoSense Gap Sensor Adjustment - continued

When Indicator Flashes, Release Feed Button



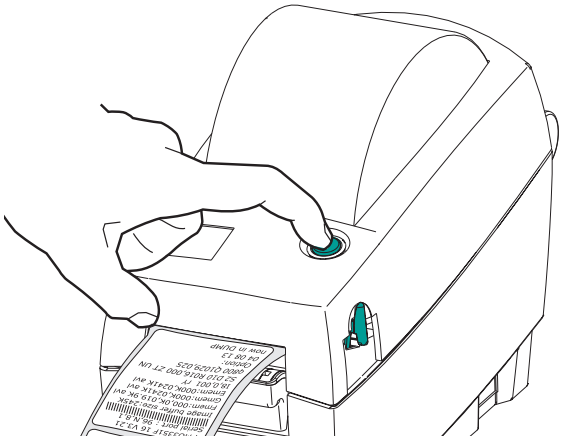
Printer Advances Media and Prints Status Summary

Note: Printer is in diagnostic dump mode

```
4 MO3351F 16 V3.21
Serial port : 96,N,8,1
Image buffer size:245K
Fmem:000,0K,019.9K avl
Gmem:000K,0241K avl
Emem:000K,0241K avl
I8,0,001  rY
S2 D8 R016,000 ZT UN
q800 Q1029,025
Option:
04 08 13
now in DUMP
```

Tap Feed Button To Begin Normal Operation

Note: Printer prints "out of DUMP"

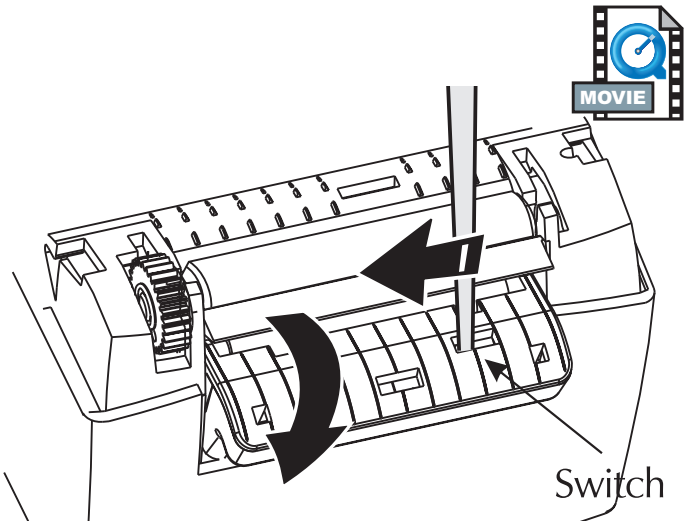


If the indicator remains orange or red, see the troubleshooting steps.

Label Dispenser Option

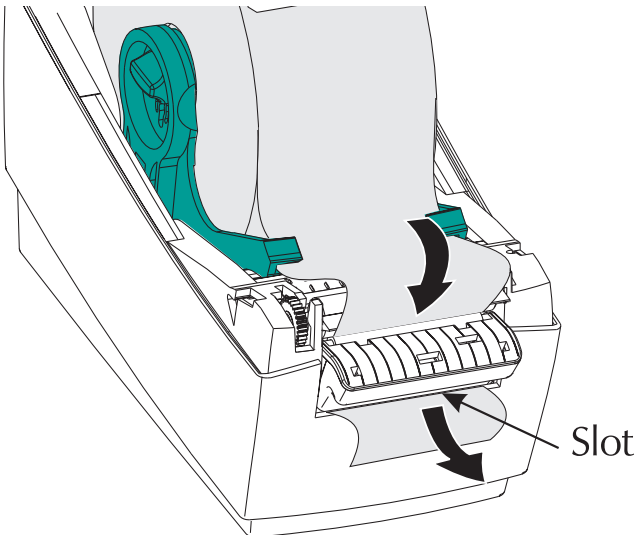
Open Door

Use a Stylus to Switch On the Label Taken Sensor

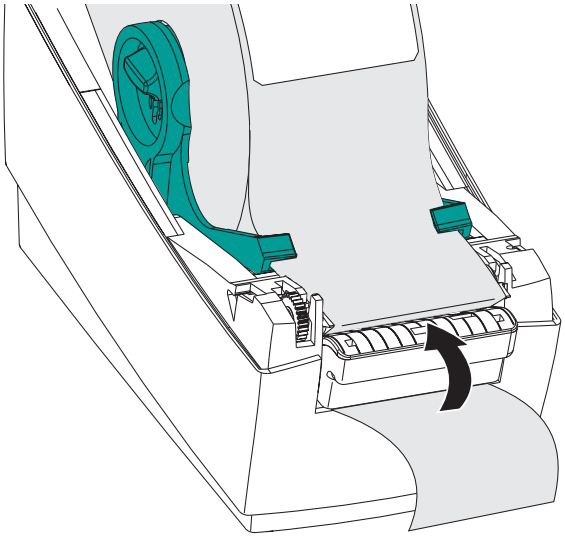


Remove Several Labels

Push Liner Through Slot



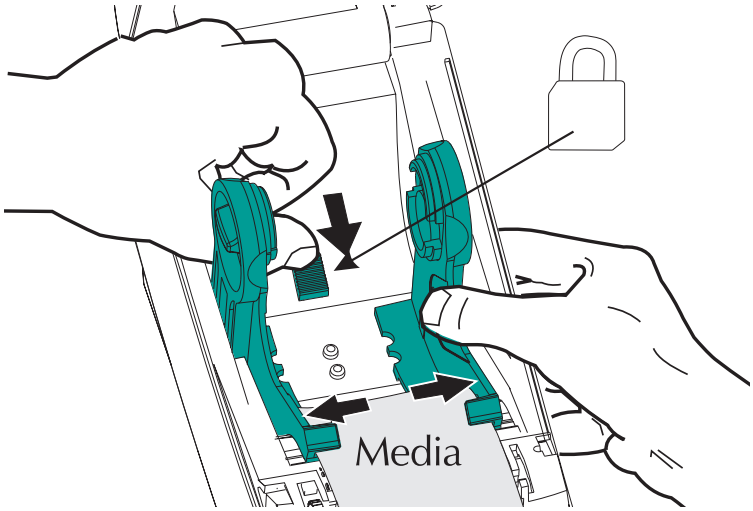
Close Door



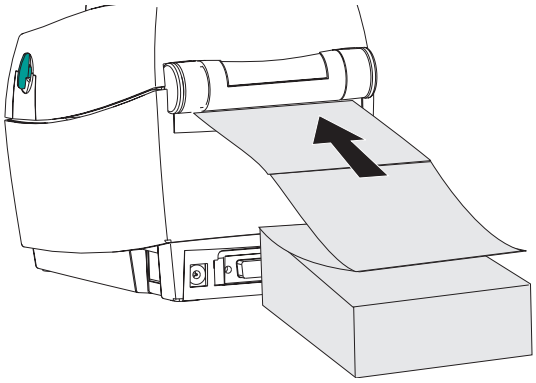
Using Fan-Fold Media

Open Guides to Width of Media

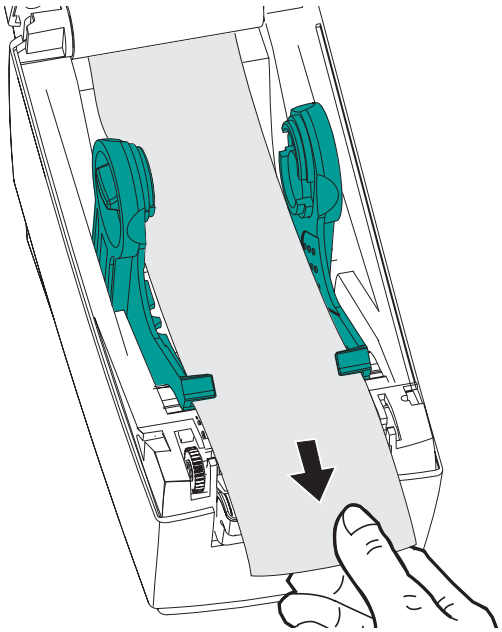
Lock Guides in Place



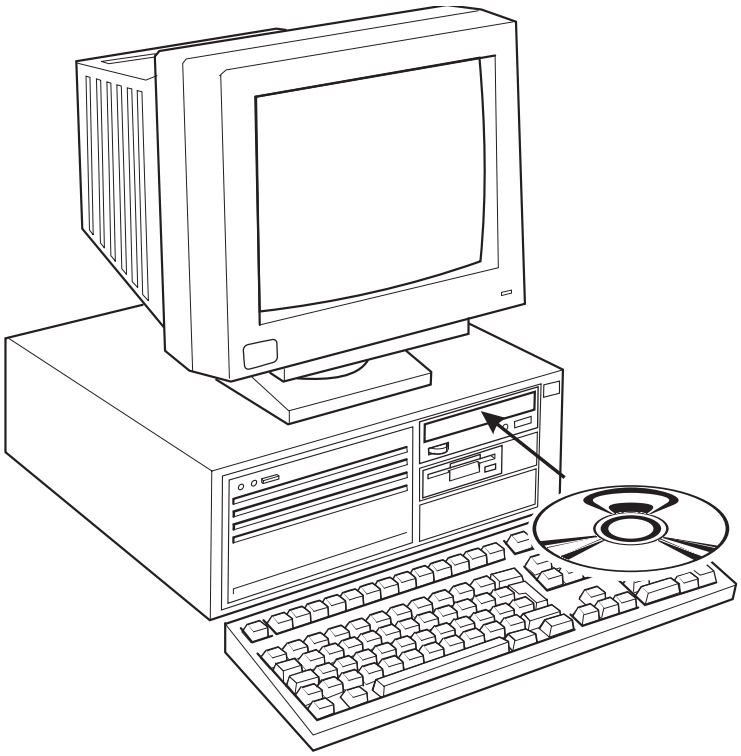
Insert Media



Thread Media Through Guides



Step ❺ Install Software



Start your computer and follow the installation instructions on the compact disc (CD).

Appendix A - Troubleshooting

Problem	Solution or Reason
STATUS Indicator	
Does not light when power switch is turned to ON (I) position.	1. Check power connections from A.C. outlet to power supply to printer.
Lights GREEN, but printer will not print.	1. Check interface cable connections from computer to printer. 2. Make sure top cover is locked closed.
Blinks GREEN-RED-RED.	1. Operator has paused the printer during a batch job. Tap the FEED button to continue.
Lights AMBER.	1. Printer has encountered a syntax or command error.
Blinks RED.	1. The optional cover open sensor is active. Press top cover to close and lock.
Lights RED.	1. Media is out. Reload a new source of media so printer can continue printing. 2. Power-up failure.
Blinks GREEN-AMBER.	1. AutoSense in process. Wait until printer dispenses a status report.
Lights AMBER-RED.	1. Download in process.
Operation	
Printer appears to be working (media is being fed out), but nothing is printed.	1. Verify that the labels are the correct type (direct thermal). 2. Check that the roll is loaded with the direct thermal side facing up. 3. Clean the print head with cleaning pen. 4. Ensure top cover is locked closed.
Printing is faded or poor quality.	1. Clean the print head with cleaning pen. 2. Adjust print speed/darkness in software.

Problem	Solution or Reason
Prints only partial label or skips a label.	1. Perform AutoSense gap sensor adjustment on page 8. 2. Label caught on print head. 3. Print head is not properly latched. 4. Possible software problem. Check the printer memory configuration. Refer to the EPL2 Programming manual.
Printing stops and STATUS indicator lights ORANGE or RED.	1. Perform AutoSense gap sensor adjustment on page 8. 2. Possible problem with label stock. Use only Eltron approved labels and tags. 3. Possible label jam. 4. Insufficient memory for label size. Check the printer memory configuration. 5. Possible software problem. Refer to the EPL2 Programming manual.

Other Support Resources

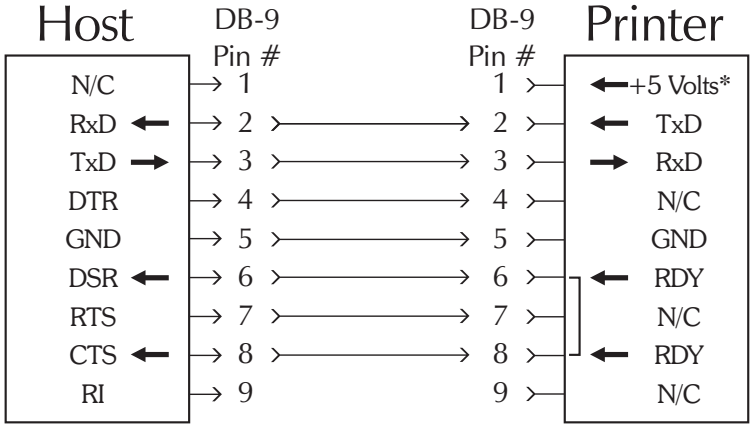
The first troubleshooting reference source is the table on the previous page. Next, contact the dealer where you purchased your printer.

Zebra Technologies also provides a variety of information and user support services:

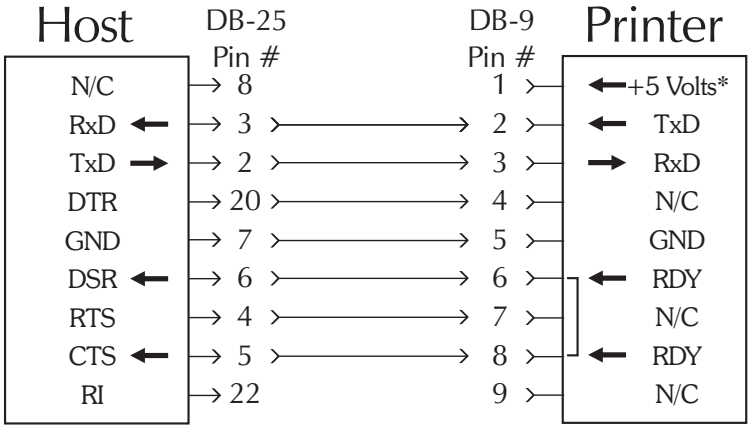
- ***Internet****:*
  http://www.eltron.com
  ftp: //ftp.eltron.com
  e-mail:
  Label Printers: techsup@eltron.com
  Card Printers: cardsup@eltron.com
  Europe: eurosup@eltron.com
  Singapore: asiasup@eltron.com
  Latin America: latinsup@eltron.com
- ***Customer Service***: +1 (800) 344 4003
  For the name of a dealer in your area.
- ***Technical Support FAX:***
  USA: +1 (805) 579 1808
  Asia: +65 84 20 366
  Europe: +44 (0) 1189 895 762
  Latin America: +1 (847) 584 2725
  For your assistance and support with Eltron printers and software.

Serial Interface Cable Wiring

The figure below displays the cable wiring required to use the printer's RS-232 serial interface.



Female DB-9 to Male DB-9
Cable P/N 300017-006 (6') or 300017-010 (10')

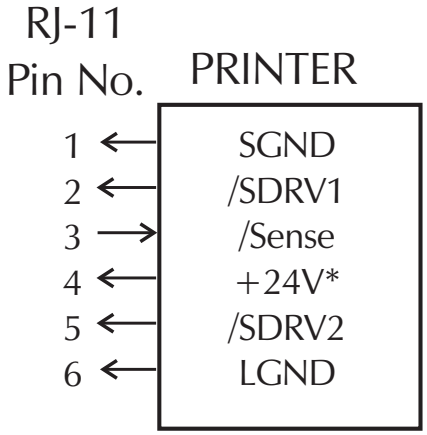


Female DB-25 to Male DB-9
Cable P/N 300018-006 (6')

*+5 volts at 150 mA for external device (e.g. KDU or scanner)

Cash Drawer Cable Wiring

The figure below displays the pin assignments for the printer's retail cash drawer interface. Refer to the cash draw manufacturer's documentation for proper drawer wiring.

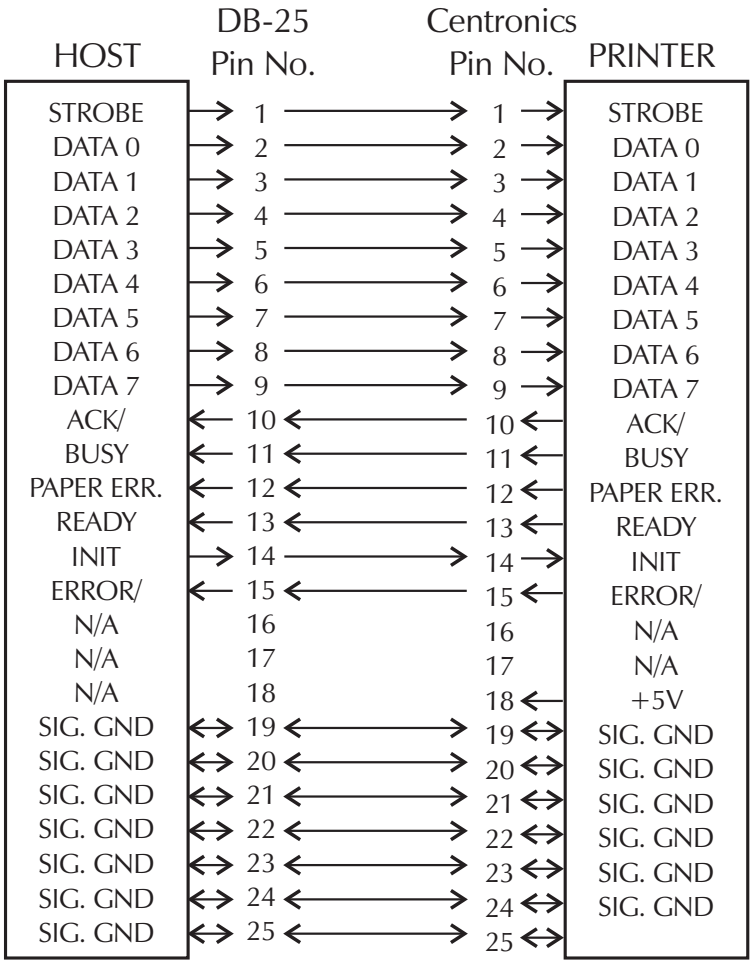


Male RJ-11

*+24 volts D.C. at no greater than 1.5 amps.

Parallel Interface Cable Wiring

The figure below displays the cable wiring required to use the printer's Centronics parallel interface.



Female DB-25 to Male Centronics (Cable)

+5 volts at 300 mA for external device (e.g. KDU or scanner)

Cleaning the Print Head

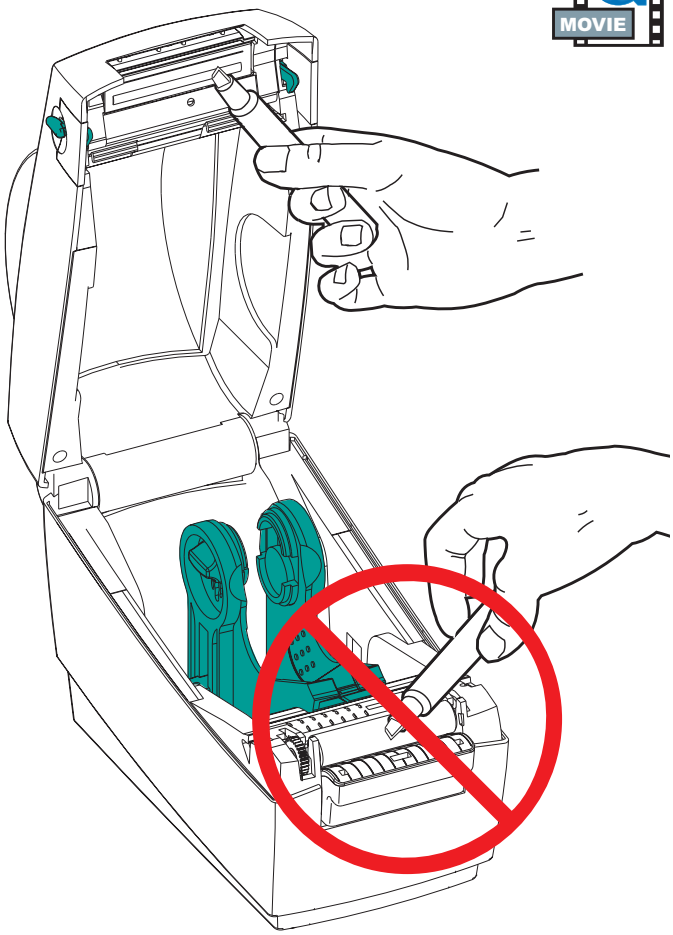
When you load new media, you can also clean the print head.

MOVIE

Rub Cleaning Pen Across Dark Area of Print Head

Wait One Minute Before Closing Printer

Do Not Clean Roller



Appendix B - Accessories

Accessories available for the printer are listed below. Always refer to the ELTRON part number when placing an order. For the name of an Eltron brand dealer in your area, call: **1(805) 579-1800** or the nearest Zebra Technologies office (located on the back of this manual).

Description	Part Number
Parallel Interface Cable, 6'	300016-006
Parallel Interface Cable, 10'	300016-010
Serial Interface Cable, 6' (DB-9 to DB-9)	300017-006
Serial Interface Cable, 10' (DB-9 to DB-9)	300017-010
Serial Interface Cable, 6' (DB-25 to DB-9)	300018-006
Power Rewinder, 120V	103284-001
Power Rewinder, 230V	103284-002
Create-A-Label 3 Software for Windows	105524-001
Keyboard Display Unit	120180-001
User's Manual (this manual)	980293-001
Programmer's Manual	980009-001
Software and Documentation CD	105551-001

World Wide Offices:

Zebra Technologies Corporation
Eltron Products
1001 Flynn Road
Camarillo, CA 93012-8706 USA
Phone: +1 (805) 579 1800
FAX: +1 (805) 579 1808
e-mail: sales@eltron.com

Zebra Technologies, Europe
Zebra House
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